

## Basic Information

<b>Product Name</b>	Anti-ROCK1 Antibody	
<b>Gene Name</b>	ROCK1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human ROCK1 recombinant protein (Position: K601-N1319).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	158 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

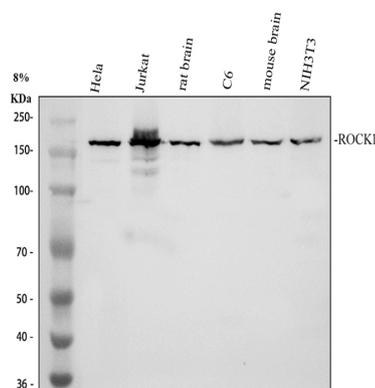
## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

This gene encodes a protein serine/threonine kinase that is activated when bound to the GTP-bound form of Rho. The small GTPase Rho regulates formation of focal adhesions and stress fibers of fibroblasts, as well as adhesion and aggregation of platelets and lymphocytes by shuttling between the inactive GDP-bound form and the active GTP-bound form. Rho is also essential in cytokinesis and plays a role in transcriptional activation by serum response factor. This protein, a downstream effector of Rho, phosphorylates and activates LIM kinase, which in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. A pseudogene, related to this gene, is also located on chromosome 18.

## Selected Validation Data



Western blot analysis of ROCK1 using anti-ROCK1 antibody

(A00722-5). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human Jurkat whole cell lysates,

Lane 3: rat brain tissue lysates,

Lane 4: rat C6 whole cell lysates,

Lane 5: mouse brain tissue lysates,

Lane 6: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

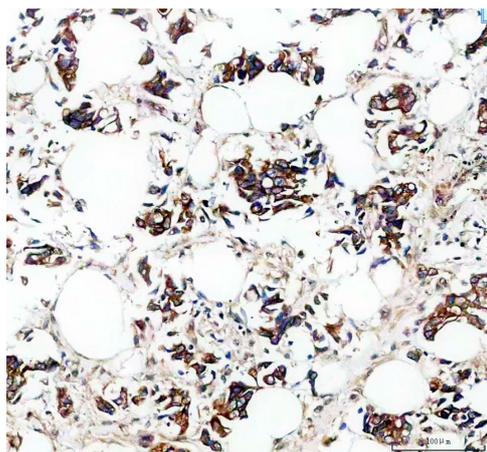
Then the membrane was incubated with rabbit anti-ROCK1

antigen A03957-Aen affinity purified polyclonal antibody (A00722-5) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP

secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A

specific band was detected for ROCK1 at approximately 158 kDa.

The expected band size for ROCK1 is at 158 kDa.



IHC analysis of ROCK1 using anti-ROCK1 antibody (A00722-5).

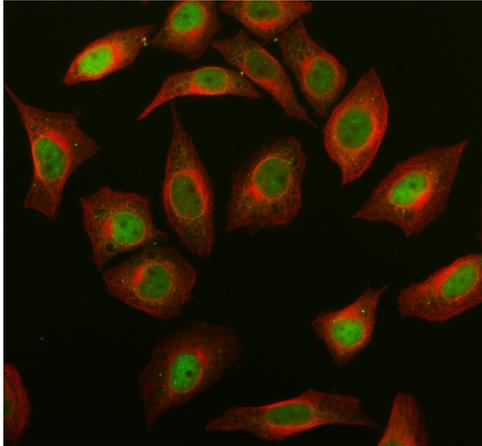
ROCK1 was detected in a paraffin-embedded section of human

breast cancer tissue. The tissue section was incubated with rabbit

anti-ROCK1 Antibody (A00722-5) at a dilution of 1:200 and

developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit

(Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of ROCK1 using anti-ROCK1 antibody (A00722-5) and anti-Alpha Tubulin antibody (M03989-3).

ROCK1 was detected in an immunocytochemical section of SiHa cells. The section was incubated with rabbit anti-ROCK1 Antibody (A00722-5) at a dilution of 1:100. Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green) (Catalog # BA1127) and Cy3-conjugated Anti-mouse IgG Secondary Antibody (red) (Catalog # BA1031) were used as secondary antibody.